State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0021547**
Discharge Class (CL):	**05**			DEC Number:	**5-5332-00003/00002**
Toxic Class (TX):	**T**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**10 - 05**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**C-134**	Item No.:	**830.6 - 464**	Modification Dates (EDPM):	
Compact Area:	**NEIWPCC**				

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. '1251 et.seq.)

PERMITTEE NAME AND ADDRESS					
Name:	**Village of Granville**	Attention:	**Mayor**		
Street:	**51 Quaker Street, PO BOX 208**				
City:	**Granville**	State:	**NY**	Zip Code:	**12832**
Email:	**Granville@roadrunner.com**	Phone:	**518-642-2640**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**Village of Granville Wastewater Treatment Plant**													
Address / Location:	**90 Mettowee Street**									County:	**Washington**			
City:	**Granville**					State:	**NY**			Zip Code:	**12832**			
Facility Location:		Latitude:	**43**	°	**24**	’	**49**	” N	& Longitude:	**73**	°	**16**	’	**23.9**	” W
Primary Outfall No.:	**001**	Latitude:	**43**	°	**24**	’	**51**	” N	& Longitude:	**73**	°	**16**	’	**23.5**	” W
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Mettawee River**						Class:	**C**	Standard:	**C(T)**		

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:
CO BWP - Permit Coordinator
BWP – Permit Writer
CO BWC - SCIS
RWE
RPA
EPA Region II
NYSEFC

Permit Administrator:			
Address:	625 Broadway Albany, NY 12233-1750		
Signature:		Date:	/ /

Contents

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the Department.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See NYSDEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year (unless otherwise specified)	Mettawee River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	1.3	MGD	-	-	Continuous	Recorder	X		
Temperature	Daily Maximum	Monitor	ºF	-	-	2/day	Grab		X	
pH	Daily Minimum	6.0	SU	-	-	2/day	Grab		X	
	Daily Maximum	9.0	SU	-	-					
$CBOD_5$	Monthly Average	25	mg/L	270	lbs/d	1/week	24-hr. Comp.	X	X	1
	7-Day Average	40	mg/L	430	lbs/d	1/week	24-hr. Comp.		X	
UOD (June 1st – Oct. 31st)	Daily Maximum	47	mg/L	-	-	1/week	Calculated		X	2
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	330	lbs/d	1/week	24-hr. Comp.	X	X	1
	7-Day Average	45	mg/L	490	lbs/d	1/week	24-hr. Comp.		X	
Settleable Solids	Daily Maximum	0.3	mL/L	-	-	2/day	Grab		X	
Ammonia (as N) (June 1st – Oct. 31st)	Monthly Average	5.5	mg/L	-	-	1/week	24-hr. Comp.		X	
Ammonia (as N) (Nov. 1st – May 31st)	Monthly Average	12.4	mg/L	-	-	1/week	24-hr. Comp		X	
Total Kjeldahl Nitrogen (TKN) (as N)	Daily Maximum	Monitor	mg/L	-	-	1/week	24-hr. Comp.		X	
Total Phosphorus (as P)	Monthly Average	0.8	mg/L	Monitor	lbs/d	1/week	24-hr. Comp.		X	
	12 MRA	-	-	4.3	lbs/d	1/month	Calculated		X	3
Total Mercury	Daily Maximum	50	ng/L	-	-	1/month	Grab	X	X	
Total Copper	Daily Maximum	53	ug/L	-	-	1/quarter	Grab		X	4,5
Biennial Pollutant Scan	Daily Maximum	-	-	-	-	1/Two Years	-		X	6

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL	-	-	1/week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL	-	-	1/week	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L	-	-	2/day	Grab		X	7,8

Permit Limits Continued on Next Page

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	-	-	1.4	TUa	1/quarter	See footnote		X	9
WET - Acute Vertebrate	See footnote	-	-	1.4	TUa	1/quarter	See footnote		X	9
WET - Chronic Invertebrate	See footnote	-	-	5.3	TUc	1/quarter	See footnote		X	9
WET - Chronic Vertebrate	See footnote	-	-	5.3	TUc	1/quarter	See footnote		X	9

FOOTNOTES:

1. Effluent shall not exceed 15% and 15% of influent concentration values for $CBOD_5$ & TSS respectively.

2. Ultimate Oxygen Demand (UOD) shall be computed as follows: $UOD = (1.5 \times CBOD_5) + (4.5 \times TKN)$.

3. The 12-month rolling average for Phosphorus is defined as the sum of the current month's monthly average concentration or load added to the monthly/quarterly/semi-annual averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.

4. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

5. **This is a final effluent limitation.** See Schedule of Compliance for any applicable interim effluent limitations.

6. Biennial Pollutant Scan: The permittee shall perform effluent sampling every two (2) years for all applicable pollutants identified in the NY-2A Application, Tables A - D. Sampling data shall be collected according to the guidance in the NY-2A application and maintained by the permittee. Monitoring results shall not be submitted on the DMR. Data shall be submitted with the next submission of the NY-2A form.

7. Sampling and reporting for total residual chlorine are only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.

8. This is a Compliance Level. The calculated WQBEL is 0.026 mg/L.

9. **Whole Effluent Toxicity (WET) Testing:**

   Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 4.6:1 for acute, and 5.3:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 5 and 0.

Footnotes Continued on Next Page

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUc. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUc of 10.0.

The complete test report including all bench sheets, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period with your WET DMR and to the WET@dec.ny.gov email address. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48-hr LC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Identification/Reduction Evaluation (TI/RE) in accordance with Department guidance. Enforceable WET limits may also apply. The permittee shall be notified in writing by their Regional DEC office of additional requirements. The written notification shall include the reason(s) why such testing, TI/RE and/or limits are required.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on 6/16/2022, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the “No Exposure Certification Form” found on the NYSDEC website.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:

   a. Monitoring - Monitoring at Outfall 001, influent and other locations tributary to compliance points shall be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136[1]. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

      Minimum required monitoring is as follows:

      i. Sewage Treatment Plant Influent and/or Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.
      ii. *Key Locations* and *Potential Mercury Sources* –The permit includes reduced monitoring requirements and does not require key location sampling. See section 2.a.iv below.
      iii. Hauled Wastes – The permittee must establish procedures for the acceptance of hauled waste to ensure
      iv. the hauled waste is not a potential mercury source. Loads which may exceed 500 ng/L,[2] must receive approval from the Department prior to acceptance.
      v. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to compliance points).

   b. Control Strategy - The control strategy must contain the following minimum elements:

      i. Pretreatment/Sewer Use Law - The permittee must review pretreatment program requirements and the Sewer Use Law (SUL) to ensure it is up-to-date and enforceable with applicable permit requirements and will support efforts to achieve a dissolved mercury concentration of 0.70 ng/L in the effluent.
      ii. Monitoring and Inventory/Inspections for Outfall 001 -
         1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must enforce its sewer use law to track down and minimize these sources.
         2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
            a) Dental Facilities
               1. The permittee must maintain an inventory of each dental facility.
               2. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program,[3] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[4] form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the "Amalgam Waste Compliance Report for Dental Dischargers" are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
               3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.

[1] Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10.*
[2] A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR Part 261.11. 500 ng/L is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.
[3] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.
[4] The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here: https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf

MERCURY MINIMIZATION PROGRAM (MMP) - Type I (continued)

b) Other *potential mercury sources*
   1. The permittee must maintain an inventory of other *potential mercury sources.*
   2. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources.* The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
   3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.

iii. Systems with CSO & Type II SSO Outfalls – Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.

iv. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.

v. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury

vi. concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

c. **Status Report - An annual** status report must be developed and maintained on site, in accordance with the Schedule of Additional Submittals, summarizing:
   i. All MMP monitoring results for Outfall 001 for the previous reporting period;
   ii. A list of known and *potential mercury sources* for Outfall 001
      1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
   iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
   iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
   v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

   The permittee must maintain a file with all MMP documentation. The file must be available for review by Department representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
   b. Effluent discharges exceed the current permit limitation(s); or
   c. A letter from the Department identifies inadequacies in the MMP.

   The Department may use information in the status reports, as applicable in accordance with 2.c of this MMP, to determine if the permit limitations and MMP Type is appropriate for the facility.

DEFINITIONS:
Key location – a location within the collection/wastewater system (e.g. including but not limited to a specific manhole/access point, tributary sewer/wastewater connection, or user discharge point) identified by the permittee as a potential mercury source. The permittee may adjust key locations based upon sampling and/or best professional judgement.
Potential mercury source – a source identified by the permittee that may reasonably be expected to have total mercury contained in the discharge. Some potential mercury sources include switches, fluorescent lightbulbs, cleaners, degreasers, thermometers, batteries, hauled wastes, universities, hospitals, laboratories, landfills, Brownfield sites, or raw material storage.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address:

NYSDEC Division of Water Regional Phone: ( ) - ### - ####

(e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[5]
001	Total Copper Concentration Limit The permittee shall comply with the final effluent concentration limit of 53 ug/L for total copper. The interim limits are in the table below. Should the additional sampling or source control efforts reduce the level of uncertainty related to discharge levels such that no reasonable potential to exceed the WQS exists, the permittee may request a permit modification to remove the copper limit before the final limit becomes effective.	EDP + 48 Months
001	Copper Sampling Status Report The permittee shall submit the results of all Copper sampling over the past 6 months. The permittee may choose to sample more frequently than required in the limit set table.	EDP + 6 Months And Every 6 Months Thereafter, Until EDP + 42 Months
Unless noted otherwise, the above actions are one-time requirements.		

OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
001	Total Copper	Daily Maximum	Monitor	mg/L	-	-	1/Quarter	Grab	-	X	1
Notes:	1. Interim limits expire EDP + 48 months.										

b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer and to the Bureau of Water Permits.

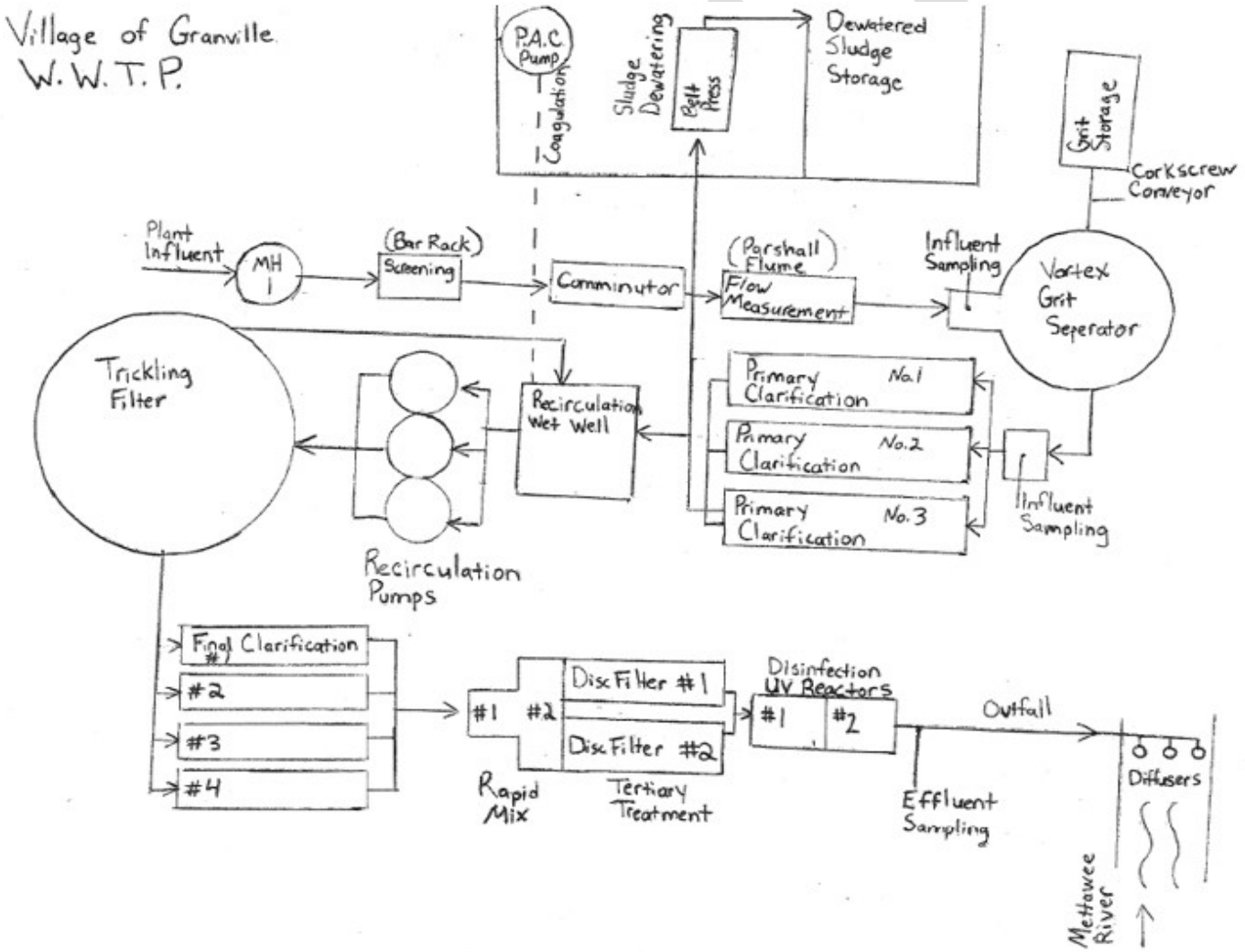
[5] 6 NYCRR 750-1.14 (a)

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

Influent: After Parshall Flume

Effluent: After UV disinfection



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through I as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements	6 NYCRR 750-2.5, 2.7 & 1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)
9.	Additional conditions applicable to a POTW	6 NYCRR 750-2.9

F. Planned Changes

1. The permittee shall give notice to the Department as soon as possible of planned physical alterations or additions to the permitted facility when:

   a. The alteration or addition to the permitted facility may meet any of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

2. Notification Requirement for POTWs
   All POTWs shall provide adequate notice to the Department and the USEPA of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on:
      i. the quality and quantity of effluent introduced into the POTW, and
      ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

   POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:
   U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866

G. Sludge Management
   The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

H. SPDES Permit Program Fee
   The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

I. Water Treatment Chemicals (WTCs)
   New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
   1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the Department.
   2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
   3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the Department's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.

B. Discharge Monitoring Reports (DMRs): Completed DMR forms shall be submitted for each (1) month reporting period in accordance with the DMR Manual available on Department's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/8461.html. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

Attach the monthly "Wastewater Facility Operation Report" (form 92-15-7) and any required DMR attachments electronically to the DMR or with the hardcopy submittal.

The first monitoring period begins on the effective date of this permit, and, unless otherwise required, the reports are due no later than the 28th day of the month following the end of each monitoring period.

C. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505 Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 3
220 White Plains Road, Suite 110, Tarrytown, NY 10591

D. Bypass and Sewage Pollutant Right to Know Reporting: In accordance with the Sewage Pollutant Right to Know Act (ECL § 17-0826-a), Publicly Owned Treatment Works (POTWs) are required to notify DEC and Department of Health within two hours of discovery of an untreated or partially treated sewage discharge and to notify the public and adjoining municipalities within four hours of discovery. Information regarding reporting and other requirements of this program may be found on the Department's website. In addition, POTWs are required to provide a five-day incident report and supplemental information to the DEC in accordance with Part 750-2.7(d) by utilizing the Division of Water Report of Noncompliance Event form unless waived by DEC on a case-by-case basis.

E. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

SCHEDULE OF ADDITIONAL SUBMITTALS

Outfall(s)	Required Action	Due Date
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	Attach to the December DMR
001	ANNUAL FLOW CERTIFICATION The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR (March 28th)

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.	Retain and submit with next NY-2A Application
001	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
001	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the NYSDEC website.	EDP + 5 Years, and every 5 years thereafter
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, annually thereafter

F. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

G. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

H. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

I. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

J. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet
Village of Granville
Village of Granville WWTP
NY0021547

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Village of Granville WWTP. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated flow limit from monitor only to 1.3 MGD
- Increased sampling frequency of pH, Temperature and Settleable Solids
- Removed influent monitoring and/or reporting for pH, Settleable Solids, BOD_5 and TSS 7-day average
- Added summer UOD limit of 47 mg/L
- Added TKN monitoring requirement
- Changed BOD_5 limits to $CBOD_5$ limits (concentration & loading)
- Updated TSS loading limits to account for existing design flow limit
- Revised Ammonia effluent limitations for reporting as NH_3 to as N
- Added reporting of Monthly Average Phosphorus loading
- Added 12 Month-Rolling Average Phosphorus loading limit of 4.3 lbs/d
- Changed composite sampling from 6-hrs to 24-hrs
- Added daily maximum Mercury limit of 50 ng/L and new Mercury Minimization Program – Type I requirements
- Added Copper interim and final limits and added Schedule of Compliance with milestone to meet final limit.
- Updated the table footnotes
- Added new Biennial Pollutant Scan requirement
- Removed TRC monthly average concentration limit and loading limits, updated daily max concentration limit to 0.03 mg/L to reflect the ML
- Added WET testing requirements
- Updated Stormwater Pollution Prevention Requirements
- Updated Recording, Reporting and Additional Monitoring Requirements

This factsheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this factsheet.

Administrative History

3/10/2000 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 7/1/2004. The 2000 permit, along with all subsequent modifications, has formed the basis of this permit.

The permit was administratively renewed in 2004 and again in 2009 and 2014. The most recent permit administrative renewal was effective until 6/30/2019.

12/1/2006 Permit was modified and included a technical review, which added a flow change, BOD/TSS loading limit updates, and a phosphorus limit update.

7/1/2019 The current permit was extended pursuant to SAPA[1] via letter on 10/22/2018.

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)

3/28/2022 Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score[2]. At the time of the RFI, the facility had an EBPS score of 240.

9/21/2022 The Village of Granville submitted an NY-2A permit application.

The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

This facility is a publicly owned treatment works that receives flow from domestic users, with effluent consisting of treated sanitary. The plant was constructed in the 1970s and upgraded in the early 2000s to meet the phosphorus limit and included a design flow increase. A 2018 capital project replaced components from the 1970s that had reached the end of their useful life and included installation of a standby generator and auto transfer switch. The collection system consists of separate sewers. The facility does not have any significant industrial users (SIUs) that discharge process water.

The current 1.3 MGD treatment plant consists of:

- Preliminary Treatment: Aerated Grit Chamber
- Primary Treatment: Primary Settling
- Secondary Treatment: Trickling Filter, Final Settling
- Disinfection: UV Disinfection

Sludge is pressed and dried and sent to Franklin County landfill. Grit is sent to Green Ridge Landfill.

The primary outfall (Outfall 001) is a 12" pipe with 3 diffuser ports.

The facility accepts wastewater from the following municipalities:

Municipality	SPDES #	Collection System
Village of Granville	NY0021547	Separate

Site Overview

Facility discharges to the Mettawee River, a Class C(T) waterbody, via Outfall 001.

[2] Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

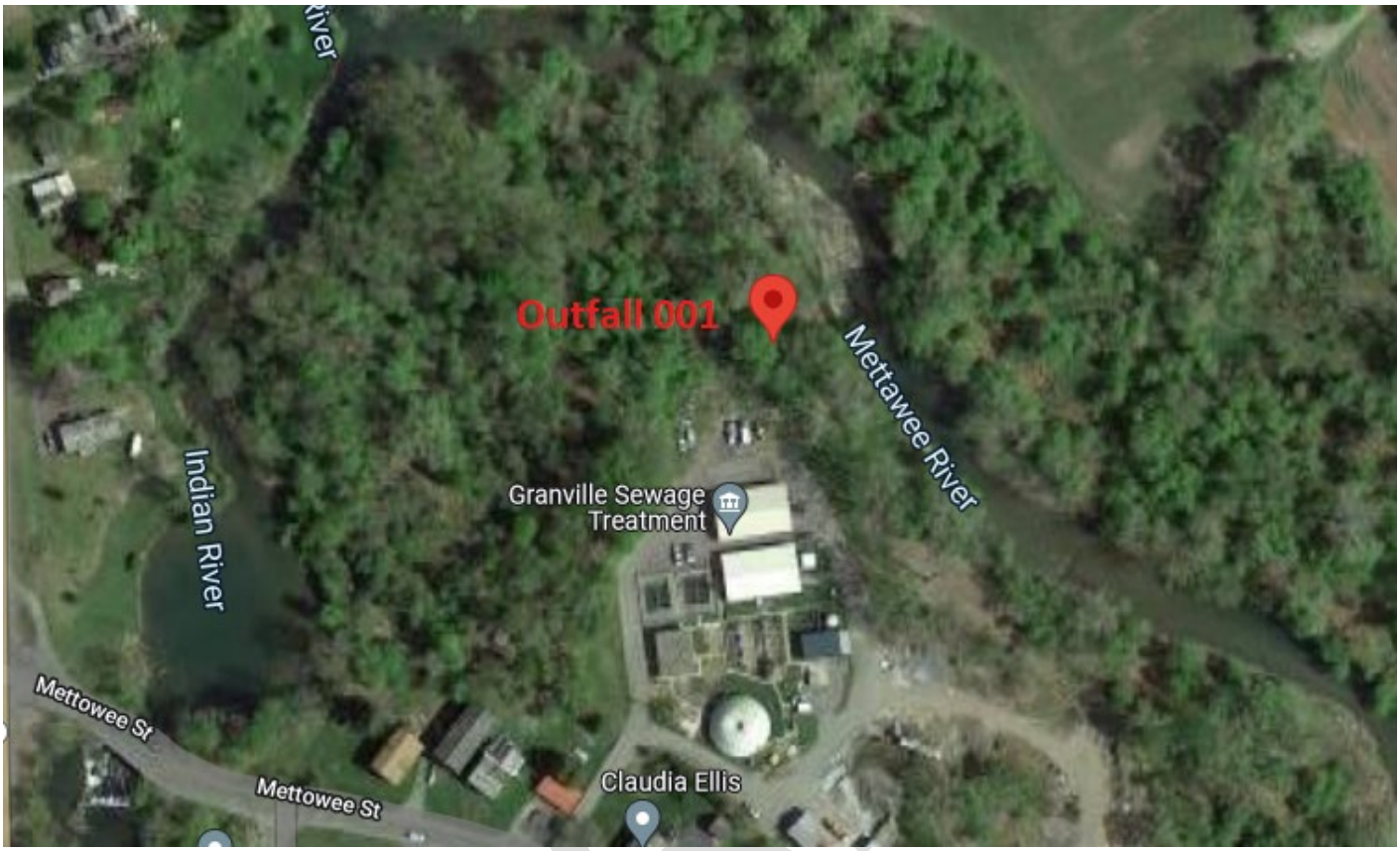


Figure 1. Outfall location.

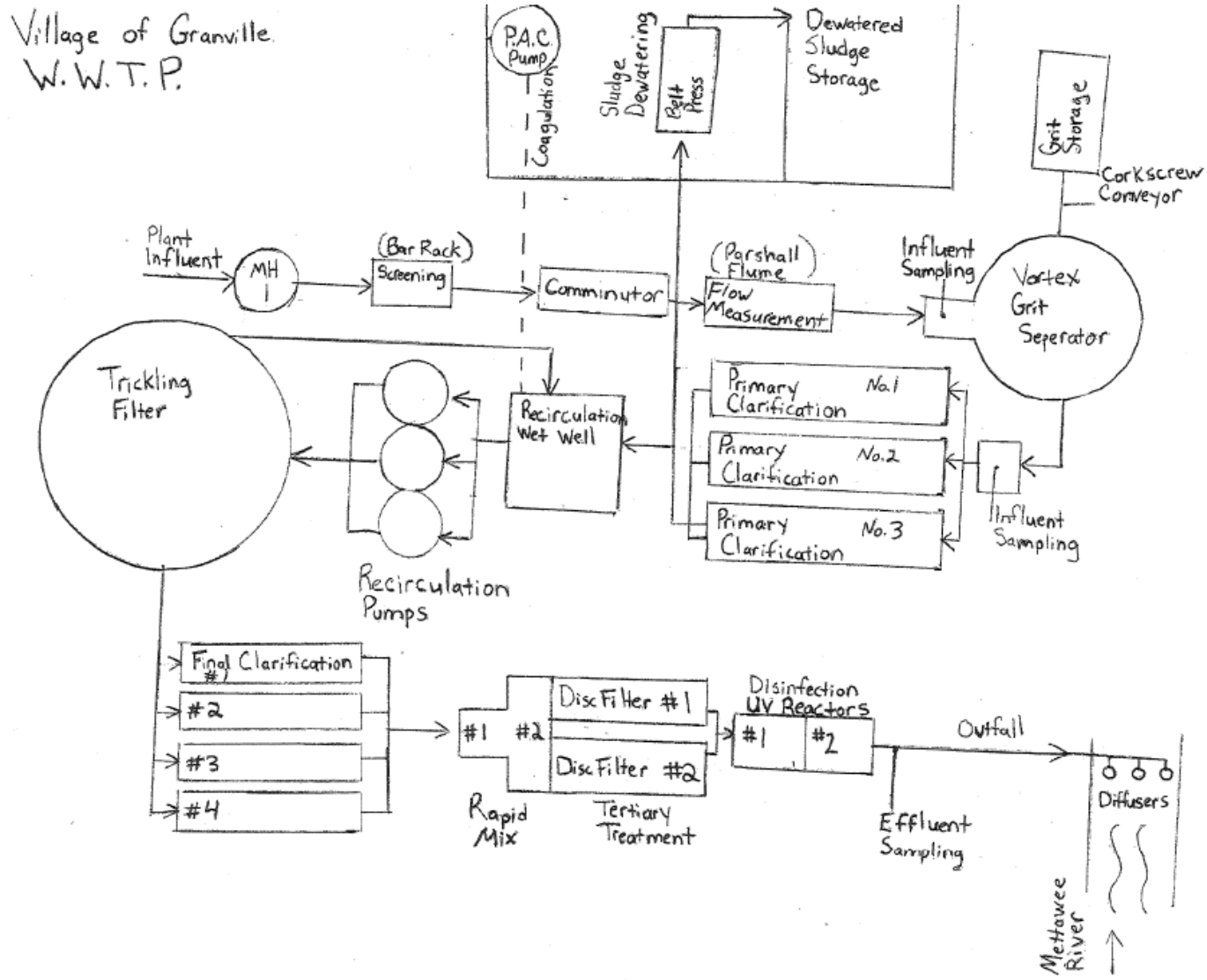


Figure 2. Wastewater treatment diagram.

Enforcement History

Compliance and enforcement information can be found on the EPA's Enforcement and Compliance History Online (ECHO) website.

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports submitted by the permittee for the period 12/1/2017 to 6/30/2022. In addition, data from 2022 NY-2A permit application was used to supplement this information. Appendix Link

Interstate Water Pollution Control Agencies

Outfall 001 is located within the New England Interstate Water Pollution Control Commission (NEIWPCC) compact area. Appendix Link

Receiving Water Information

The facility discharges via the following outfall:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary Sewage	Mettawee River, Class C(T)

Reach Description: The facility discharges to the Mettawee River. Approximately 0.16 miles downstream of the outfall is the confluence with the Indian River. Approximately 1.82 miles downstream of the river confluence is the Penrhyn Dam. See the Outfall and Receiving Water Summary Table and Appendix for additional information.

Impaired Waterbody Information

The Mettawee River segment (PWL No. 1005-0003) is not listed on the 2018 New York State Section 303(d) List of Impaired/Total Maximum Daily Load (TMDL) waters. However, this waterbody segment is located within the Lake Champlain Watershed and is subject to the applicable requirements of the Lake Champlain Phosphorus TMDL, as discussed below.

Lake Champlain TMDL Watershed Information

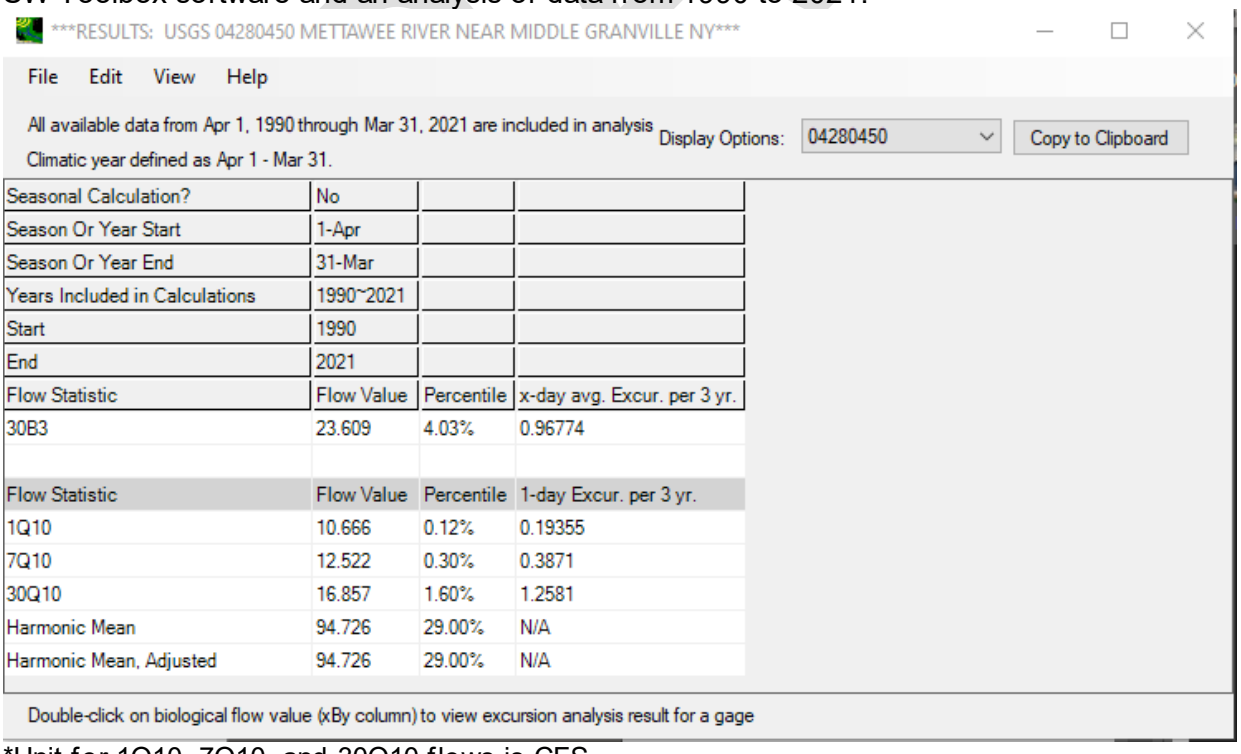
On 9/25/2002, a TMDL was approved for the Lake Champlain watershed to address phosphorus. As part of the TMDL, the discharges from the following outfalls are subject to the listed wasteload allocations (WLA) for the following parameters:

Outfall No.	Parameter	Wasteload Allocation
001	Total Phosphorus as P	4.3 lbs/day 0.80 mg/L

The Village of Granville is required to sample and report Total Phosphorus as P. The Total Phosphorus 12-month rolling average is defined as the sum of the current month's monthly average in lbs/day added to the monthly average in lbs/day from the eleven previous months divided by 12. See the Pollutant Summary Table for a discussion on the derivation of Total Phosphorus effluent limits.

Critical Receiving Water Data & Mixing Zone

The low flow condition for the Mettawee River (Class C(T)) was obtained from a drainage basin ratio analysis with USGS gage station 04280450, Mettawee River near Middle Granville, located 4 miles downstream. The 1Q10, 7Q10 and 30Q10 flows at the gage were found from the USGS SW Toolbox software and an analysis of data from 1990 to 2021.



*Unit for 1Q10, 7Q10, and 30Q10 flows is CFS

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10
Gage Name	Mettawee River Near Middle Granville		
Gage ID Number	04280450		
Low Flow at Gage (cfs)	10.666	12.522	16.857
Drainage Area at Gage (mi^2)	167	167	167
Drainage Area at Facility (mi^2)	115	115	115
Drainage Basin Ratio (facility / gage)	0.7	0.7	0.7
Calculated Flow at Facility (cfs)	7.34	8.62	11.61

The 1Q10, 7Q10, and 30Q10 flows were used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios, respectively.

Dilution Ratio = (Facility Flow + Critical Low Flow) / Facility Flow

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	4.6:1	5.3:1	6.8:1	TOGS 1.3.1

Critical receiving water data are listed in the Pollutant Summary Table at the end of this fact sheet. Appendix Link

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs), Existing Effluent Quality and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the Pollutant Summary Table.

Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria: Appendix Link

- Treatment plants which equal or exceed a discharge of 1MGD. (#7)

The requirement for WET testing is new. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location outside of the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 1.4 TUa and 5.3 TUc have been included in the permit for each species. The acute action level for each species represents the acute dilution ratio times a factor of 0.3. The chronic action level represents the chronic dilution ratio.

Anti-backsliding

The following effluent limitations are subject to an antibacksliding determination.

While TSS and BOD5 concentration limits are as stringent as they were in the previous permit, the loading limit change reflects a correction of the calculation based on the current design flow (1.3 MGD) at the plant. The previous permit erroneously used the 0.65 MGD flow from an earlier iteration of the permit. Thus, TSS and BOD5 loading effluent limitations have increased from the previous permit. This increase in allowable loadings is still expected to be protective of water quality.

Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[3] determination. Appendix Link

Discharge Notification Act Requirements

In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained. This requirement is being continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is being continued from the previous permit.

Temperature Requirements for Municipal Discharges to Trout Streams

For municipal discharges to streams classified as trout (T) or trout spawning (TS), the Department reviews the dilution and maximum reported effluent temperature.

The facility does not have a reasonable potential to cause or contribute to an excursion above the thermal criteria of 6 NYCRR 704. Therefore, the permit includes “monitor only” for effluent temperature as a year-round requirement.

Stormwater Pollution Prevention Requirements

The facility is a publicly owned treatment works ≥ 1 MGD that requires SPDES permit coverage under 40 CFR 122.26 (b)(14)(ix).

> On 6/16/2022, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The schedule of submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is new.

Mercury[4]

The multiple discharge variance (MDV) for mercury provides the framework for NYSDEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. Appendix Link

The facility is not located within the Great Lakes basin and is an EPA Major, Class 05 POTW so the permit will include requirements for the implementation of MMP Type I.

Based on 1 data point of 4.0 ng/L collected as part of the application the facility is expected to meet the new daily max permit limit of 50 ng/L (with monthly sampling frequency). The limit represents the general level currently achievable (GLCA). The data collected will be used to establish an additional 12-month rolling average effluent limit during the next permit review.

A mercury minimization program consisting of the following is also required:

- Additional monitoring
- Control strategy for implementation of the MMP

[3] As prescribed by 6 NYCRR Part 617
[4] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

- Annual status report (maintained onsite)

Copper

Sampling included with the SPDES permit application confirmed Copper in the effluent of Outfall 001 at levels up to 20 ug/L. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Therefore, a WQBEL is specified. Although existing data (1 data point) indicates compliance with the calculated WQBEL, there is a degree of uncertainty of the variability of the effluent and the ability to consistently comply with the calculated WQBEL. Therefore, a compliance schedule has been provided to allow additional time to confirm effluent levels. Should additional data indicate higher concentrations of copper in the effluent, the compliance schedule provides time to meet the final limit. The permittee may elect to implement a minimization program to identify controllable sources of Copper and develop/implement a source control strategy which may include sampling from the following locations as appropriate:

1. POTW influent and effluent
2. Raw water supply(ies)
3. Tap water
4. Domestic sewage (i.e. sample from a manhole serving only residential users)
5. Stormwater run-off
6. Wet atmospheric deposition
7. Dry atmospheric deposition
8. Toxicity Testing

Progress with these efforts would be reported in the interim status reports specified in the compliance schedule. Should the additional sampling or source control efforts reduce the level of uncertainty related to discharge levels such that no reasonable potential to exceed the WQS exists, the permittee may request a permit modification to remove the copper limit. For example, permittee may submit a modification request if

1) 5 samples were taken with maximum value less than 24 ug/L, or
2) 10 samples were taken with maximum value less than 32 ug/L, or
3) 20 samples were taken with maximum value less than 38 ug/L.

Anti-backsliding requirements do not apply to the revision to a final effluent limitation if the change is made before the scheduled date of compliance for that final effluent limitation.

Biennial Pollutant Scan

Three effluent samples for applicable parameters must be submitted with an NY-2A Application[5]. The permit includes a requirement to perform biennial sampling (once every two years) of the WWTP effluent for the parameters in the NY-2A Application, Tables A – D. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review. This requirement is new.

Schedule(s) of Compliance

A Schedule of Compliance is being included[6] for the following items (Appendix Link):

- Compliance period for attainment of final effluent limit for Copper
    - A monitoring program is being included to determine whether a potential exists to cause or contribute a water quality standard violation. The final limit for Copper will go into effect 48 months after the EDP, unless permittee uses sampling data to request its removal.

[5] Pursuant to 40 CFR 122.21(j)(4)(vi).
[6] Pursuant to 6 NYCRR 750-1.14

Schedule(s) of Additional Submittals

A schedule of additional submittals has been included for the following (Appendix Link):

- Submit Water Treatment Chemical (WTC) Annual Report Form
- Submit Annual Flow Certification
- Conduct Biennial Pollutant Scan (Results to be maintained on-site)
- Submit Whole Effluent Toxicity Testing results
- Submit Stormwater No Exposure Certification
- Mercury Minimization Program Annual Status Report (maintained onsite)

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	43° 24' 51" N	73° 16' 23.5" W	Mettawee River	Class C(T)	C-134 PWL: 1005-0003	10 / 05	109[7]	4.8	5.6	7.5	1.3	4.6:1	5.3:1	6.8:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 12/2017 to 06/2022 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	Monitor	0.74 Actual Average	55 / 0	1.3	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL
	The flow limit is set at the design flow of the wastewater treatment facility. Flow limit of monitor only from the existing permit appears to have been an error – the 2017 modification mistakenly used the limit sets from the 2000 permit mod as the basis instead of the more recent 2006 mod.														
pH	SU	Minimum	6	6.5 Min	55 / 0	6.0	TOGS 1.3.3	-	-	6.5 – 8.5	Range	-	703.3	-	TBEL
		Maximum	9	7.8 Max	55 / 0	9.0									
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS.														

[7] Ambient hardness data obtained from SPDES permit application attachment submitted 8/5/2022.

[8] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Temperature	°F	Daily Max	Monitor	72 Max	55 / 0	Monitor	750-1.13 Monitor	-	Narrative (Trout): No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout				704.2	-	TBEL
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit. See the Temperature Requirements for Municipal Discharges to Trout Streams section of the factsheet for a full discussion.														
Dissolved Oxygen (DO) SUMMER 6/1 – 10/31	mg/L	*Not currently required*	10.2	1 / 0	-	-	-	2.9 Critical Point	(T) 5.0 mg/L	Narrative	-	703.3	-	WQBEL	
	EEQ value from PPS submitted with NY-2A application. The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 2.0 mg/l ((assumed value consistent with TOGS 1.3.1D)), Effluent UOD = 99 mg/L (Effluent BOD5 = 45 mg/L (existing permit limit), Effluent NOD = 40 mg/L (calculated from existing ammonia permit limit)), and ambient upstream DO = 7.5 mg/L (assumed 90% saturation value). Assumed upstream UOD = 3 mg/L Reach Description: The model included the additional flow from the confluence with the Indian River, approximately 0.16 miles downstream from the outfall. The reach continues approximately 1.8 miles downstream, to the Penrhyn Dam. The model showed that a WQBEL for UOD of 47 mg/L is necessary to maintain adequate downstream water quality. The limits for BOD5, UOD, and NH3 are considered protective of the DO WQS and therefore, no DO limit is being included.														
Dissolved Oxygen (DO) WINTER 11/1 – 5/31	mg/L	*Not currently required*	-	-	-	-	-	5.2 Critical Point	(T) 5.0 mg/L	Narrative	No Reasonable Potential	703.3	-	No Limitation	
	The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 0.0 mg/l (assumed worst case scenario), Effluent UOD = 150 mg/L (Effluent BOD5 = 45 mg/L (existing permit limit), Effluent NOD = 91 mg/L (calculated from existing ammonia permit limit)), and ambient upstream DO = 10 mg/L (assumed 90% saturation value). Assumed upstream UOD = 3 mg/L Reach Description: The model included the additional flow from the confluence with the Indian River, approximately 0.16 miles downstream from the outfall. The reach continues approximately 1.8 miles downstream, to the Penrhyn Dam. The model showed that DO standards are maintained and consequently WQBELs for DO and UOD are unnecessary.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[8]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Ultimate Oxygen Demand (UOD) SUMMER 6/1 – 10/31	mg/L	*Not currently required*		-	-	-	-	-	See Dissolved Oxygen			**47**	703.3	-	WQBEL
	See Dissolved Oxygen. UOD is calculated as follows: UOD = (1.5 x CBOD5) + (4.5 x TKN).														
5-day Biochemical Oxygen Demand (BOD_5) and 5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg	30	7.5	55 / 0	**$CBOD_5$** 25	TOGS 1.3.3	-	See Dissolved Oxygen				703.3	-	TBEL
		7 Day Avg	45	16	55 / 0	40	TOGS 1.3.3								
	lbs/d	Monthly Avg	163	48	55 / 0	270	TOGS 1.3.3								
		7 Day Avg	244	107	55 / 0	430	TOGS 1.3.3								
	% Rem	Minimum	85	95 Average	55 / 0	85	TOGS 1.3.3								
	The new UOD limitation requires that $CBOD_5$ be monitored. Because of this, the BOD_5 limits will be replaced by the equivalent secondary treatment standards for $CBOD_5$. Corresponding allowable loadings have been revised to reflect $CBOD_5$ concentration requirements.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	30	8.7	55 / 0	30	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		7 Day Avg	45	19	55 / 0	45	TOGS 1.3.3								
	lbs/d	Monthly Avg	163	57	55 / 0	330	TOGS 1.3.3								
		7 Day Avg	244	146	55 / 0	490	TOGS 1.3.3								
	% Rem	Minimum	85	93 Average	55 / 0	85	TOGS 1.3.3								
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect equivalent secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is reasonably protective of water quality standards.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Settleable Solids	mL/L	Daily Max	0.3	<0.1	0 / 55	0.3	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
	Consistent with TOGS 1.3.3, the effluent limitation is equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Given that adequate dilution is available the TBEL is reasonably protective of WQS.														
Nitrogen, Ammonia (as N) June 1st – Oct. 31st	mg/L	Monthly Avg	6.7 (as NH3) 5.5 (as N)	0.73 (as NH3) 0.60 (as N)	21 / 0	5.5	Antibacksliding	0.082	0.39	0.93	A(C)	No Reasonable Potential	-	-	TBEL
	The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.5 and a temperature of 24 deg C. The pH and temperature of the receiving waterbody were assumed values and consistent with TOGS 1.3.1E for trout classified waterbodies. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.6 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier[9] of 1.3 was applied to the maximum effluent concentration to account for the number of samples. In accordance with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the projected instream concentration. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to anti-backsliding, the existing limit will remain. Reporting for Ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224.														

[9] As recommended from EPA's Technical Support Document, Chapter 3.3

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Nitrogen, Ammonia (as N) Nov. 1st – May 31st	mg/L	Monthly Avg	15.1 (as NH3) 12.4 (as N)	1.1 (as NH3) 0.91 (as N)	34 / 0	12.4	Antibacksliding	0.082	0.96	1.9	A(C)	No Reasonable Potential	-	-	TBEL
	The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.5 and a temperature of 10 deg C. The pH and temperature of the receiving waterbody were assumed values and consistent with TOGS 1.3.1E for trout classified waterbodies. The projected instream concentration was calculated using the maximum reported effluent concentration of 4.9 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier[10] of 1.2 was applied to the maximum effluent concentration to account for the number of samples. In accordance with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the projected instream concentration. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to anti-backsliding, the existing limit will remain. Reporting for Ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224.														
Total Kjeldahl Nitrogen (TKN)	*mg/L*	*Not currently required*	0.5	1 / 0	Monitor	TOGS 1.3.3	-	-	-	-	-	-	-	TBEL	
	Application included value of 0.500 mg/L for TKN. TKN is used to calculate UOD. There are no TKN WQS for Class C waterbodies, since a new summer UOD limit is added, seasonal (summer) TKN monitoring is required.														
Nitrite	*mg/L*	*Not currently required*	0.059	1 / 0	-	-	-	-	-	-	-	-	-	No Limitation	
	Application included value of 0.059 mg/L for nitrite. Due to existing ammonia WQBELs and current performance exhibiting complete nitrification under typical operating conditions, the expected effluent concentration of nitrite is negligible. Therefore, reasonable potential was deemed unnecessary to calculate.														

[10] As recommended from EPA's Technical Support Document, Chapter 3.3

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[8]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Nitrate	*mg/L*	*Not currently required*		6.7	1 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	Application included values of 6.72 mg/L for Nitrate. Since there is no nitrate WQS for Class C waterbodies, no limitation is required.														
Total Phosphorus	mg/L	Monthly Avg	0.8	0.45	55 / 0	-	-	-	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.		0.8	TMDL/ WLA	-	WQBEL
	lbs/d	12 MRA	*Not currently required*			-	-	-	-			4.3			WQBEL
	Consistent with the TMDL, and to maximize phosphorus removal[11] to improve the water quality of Lake Champlain, the permit includes a total phosphorus concentration limit of 0.8 mg/L expressed as a monthly average and 12-month rolling average limitation of 4.3 lbs/day. Reporting of the Monthly Average loadings has been added for purposes of calculating the 12 MRA. Daily loading limits are provided in the Lake Champlain TMDL discussion in this factsheet.														
Total Mercury	ng/L	Daily Max	N/A	4.0	1 / 0	50	GLCA	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	See Mercury section of this factsheet.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	3.0	1 / 0	200	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	8.0	1 / 0	400	TOGS 1.3.3	-							
	Existing final permit limitations became effective 5/1/2022 when UV disinfection went online, thus only 1 data point exists within timeframe of data used for development of this permit. Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified.														

[11] Consistent with NYCRR 750-2.8(a)(5).

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Residual Chlorine (TRC)	mg/L	Monthly Avg	Monitor	-	0 / 1	-	-								Discontinued
	mg/L	Daily Max	0.034	-	0 / 1	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.026	TOGS 1.3.1	**0.03**	ML
	lbs/d	Monthly Avg	Monitor	-	0 / 1	-	-								Discontinued
	lbs/d	Daily Max	Monitor	-	0 / 1	-	-								Discontinued
	Effluent disinfection is currently required seasonally and will remain a permit requirement. Due to the low dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 0.030 mg/L is appropriate. The facility uses UV disinfection and is expected to meet this TRC limit.														
Additional Pollutants Detected															
Total Copper	ug/L	Daily Max	N/A	20	1 / 0	Monitor	BPJ	-	23	9.6	A(C)	53	703.5	-	WQBEL
	Copper was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 20 ug/L and an assumed negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.2 was applied to the projected effluent to account for the number of samples. A metals translator of 1.0 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL is specified. Given the existing performance, the facility is expected to meet the new limit. The sample collected was lower than the calculated WQBEL of 53 ug/L and the projected instream concentration is greatly affected by the number of samples and the multiplier. Because of this, and the lack of an industrial source of copper, a compliance schedule has been provided to allow time to demonstrate compliance with the final limit. Should additional data indicate higher than expected concentrations of copper in the effluent, the permittee may implement a minimization program to identify controllable sources of Copper and develop/implement a source control strategy. Should additional sampling or source control efforts demonstrate no reasonable potential to exceed the WQS, the permittee may request a permit modification. Anti-backsliding requirements do not apply to the revision to a final effluent limitation if the change is made before the scheduled date of compliance for that final effluent limitation.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Grit Removal, Primary Settling, Tricking Filter, Final Clarifier, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Dissolved Solids (TDS)	mg/L	Daily Max	N/A	375	1 / 0	-	-	-	344	500	Narrative	No Reasonable Potential	703.3	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 375 mg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.2 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation is specified.														
Zinc	ug/L	Daily Max	N/A	17	1 / 0	-	-	-	22	130	A(A)	No Reasonable Potential	-	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 17 ug/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.2 was applied to the projected effluent to account for the number of samples. A metals translator of 1.022 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation is specified.														
Oil & Grease	mg/L	*Not currently required*	5.0	1 / 0	15	1.2.1 Att C	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.		Narrative	-	-	-	No Limitation	
	Application included a value of 5.0 mg/L for oil and grease. A comparison of this value to the 15 mg/L TBEL value interpreted from the narrative water quality standard indicates there is no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation is specified.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the factsheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the factsheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a WLA of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed to

determine the existing capabilities of the wastewater treatment plants and to assure that wasteload allocations (WLAs) are allocated equitably.

Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, and/or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law[12] and USEPA interpretation[13] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

[12] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[13] U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, "Water Quality Antidegradation Policy" (September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs)

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/l, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Parts 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The Department considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the Department may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:
"EPA Technical Support Document for Water Quality-Based Toxics Control" (March 1991); EPA Region VIII's "Mixing Zones and Dilution Policy" (December 1994); NYSDEC TOGS 1.3.1, "Total

Maximum Daily Loads and Water Quality-Based Effluent Limitations" (July 1996); "CORMIX v11.0" (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded, a WQBEL is required. The procedure for developing WQBELs includes the following steps:

1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the Department;

2) identify water quality criteria applicable to these pollutants;

3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,

4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

The Department uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

For carbonaceous and nitrogenous oxygen demanding pollutants, the Department uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

A Watershed Maximum Daily Load (WMDL) may be developed by the Department to account for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments. The WMDL uses a simple dilution model, assuming full mix in the receiving stream, to calculate the maximum allowable pollutant load that can be discharged and still meet water quality standards during critical low flow in downstream segments such as those with sensitive receptors (e.g. public water supply) or higher water classification. WQBELs are established to ensure that the cumulative mass load from point source discharges does not exceed the maximum allowable load to ensure permit limits are protective of water quality.

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in 6NYCRR 702.9. TOGS 1.3.2 describes the procedures which should be followed when determining whether to include toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. POTWs which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is “sufficiently sensitive” when the method’s minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring

requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010, and subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

All surface water SPDES permittees are eligible for authorization by the MDV provided they meet the requirements specified in DOW 1.3.10.

Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.